

GRISHIN, T., *geroy sotsialisticheskogo truda*

On the basis of a cyclic operations graph. Mast. ugl. 4 no. 8:15
Ag'55. (MLRA 3:10)

1. Brigadir kombaynovoy brigady shakhty "Novo-Mospino" tresta
Sovetskugol' Stalinsloy oblasti
(Donets Basin--Coal mines and mining)

BORMOTOV, P.N., inzh.; GRISHIN, S.S.; ANTIPOV, Yu.; VITRIK, E.V., inzh.;
KOSAREV, P.S.; NEKHOROSHEV, A.I.; RYABTSEV, G.I.; KOTOV, S.F.; ZHAROVIN,
M.A., gornospasatel' (Komi ASSR, g. Ukhta)

On P.M. Solov'ev's article "Improve the design of the SP-55M self-
rescuers." Bezop.truda v prom. 6 no.7:9-11 JI '62. (MIRA 15:7)

1. Tekhnicheskoye upravleniye Kombinata ugol'nykh predpriyatiy
Kuznetskogo kamennougol'nogo basseyna (for Bormotov).
 2. Master
shakhty im. Lenina Makeyevskogo tresta ugol'noy promyshlennosti Donbassa
(for Grishin).
 3. Komandir vzvoda voyenizirovannoy gornospasatel'noy
chasti, pos.Zarudino, Novgorodskoy oblasti (for Antipov).
 4. Shakhta
No.24, Lubanskaya oblast' (for Vitrik).
 5. Zaveduyushchiy gornymi
rabotami Nikitovskogo dolomitnogo kombinata (for Kosarev).
 6. Komandir
otdeleniya No.8 VGSO, g. Shakhty, Rostovskaya obl. (for Nekhoroshev).
 7. Komandir gornospasatel'nogo otdeleniya, g. Shakhtersk, Donetskaya
obl. (for Ryabtsev).
 8. Zamestitel' glavnogo inzh. shakhty No.29
"Kapital'naya" Chelyabinskogo kombinata ugol'nykh predpriyatiy
Ministerstva ugol'noy promyshlennosti SSSR (for Kotov).
- (Respirators) (Solov'ev, P.M.)

Country : USSR
Category: Virology. Bacterial Viruses (Phages).

E

Abs Jour: Ref Zhur-Biol., No 23, 1958, No 103495

tinguished from the secondary ones not only through the mechanism of their occurrence but also in their properties. It has been established that avirulent or slightly virulent cultures of dysentery bacillus are found among the "residual" cultures, but they possess immunogenic properties. The antigenic composition of the residual and original cultures is the same. --
Ya. I. Rautenshteyn.

Card : 2/2

GRIKISHIN, S. I.

E

Country : USSR
Category: Virology, Bacterial Viruses (Phages).

Abstr Jour: Ref Zhur-Biol., No 23, 1958, No 103452.

Author : Grikishin, S.I.

Inst :

Title : "Residual" Cultures of Flexner Dysentery Bacteria.

Orig Pub: Sb Bakteriofagaya. Tbilisi, Gruzmedgiz, 1957,
239-246.

Abstract: It is suggested that the secondary growth cultures which appear in the phagolysate several hours after lysis be called "residual". They should be distinguished from the cultures which arise as the result of regeneration of filtrable forms and which are in the filtered phagolysate. Primary cultures are dis-

Card : 1/2

Microbiology - General Microbiology.

P-1

and also see: Redmer + 1961, 1958, 1953

enteritidis vs. Moscow 417 and vice versa, as a result
of which the cultured microorganisms tends to display a
change toward the strain from which the extract is pre-
pared.

Oct 2/2

G. K. S. H. I. S. I.

U.S.S.R. - General Microbiology.

F-1

Ab: Jour : Ber. Akad. Nauk SSSR, 1950, No 3, 65-75.
 Author : G. K. S. H. I., Kalinina, E. V., G. K. S. H. I.
 Inst :
 Title : Proof of the Assimilation by One Bacterial Species of
 Decomposition Products of Another Species, Using
 Labeled Atoms (p32)

Orig Pub : Vopr. Arxiv. Biol. AN USSR, 1950, No 3, 65-75

Abstract : Cultures which served for preparing the extracts labeled
 with P32, were developed on a medium with H_2HP32O_4 . The
 extract of washed cells was prepared by treating it with
 collene and shaking, and also by alternately freezing and
 thawing and subsequent filtration through a Seis filter.
 The extract was spread either on the surface of a deficient
 (7) agar or used as a liquid nutrient medium. It was estab-
 lished that Bacterium coli, strain 495, assimilates decom-
 position products of extracted cells of Salmonella

Card 1/2

GRISHIN, S. I.

GRISHIN, S. I.: "The dysentery bacteriophage, its types and the variability of Flexner's dysentery bacteria under their influence." Min Health Uzbek SSR. Tashkent State Medical Institute V. M. Holotov. Tashkent, 1956
(Dissertation for the Degree of Doctor in Medical Sciences).

So. Anizhnaya letovis', No 23, 1956

GRISHIN, S.I.

Effect of temperature on some types of dysentery bacteriophage.
Vop.kraev.pat. no.4:46-53 '54. (MLRA 9:12)
(BACTERIOPHAGE) (DYSENTERY)
(TEMPERATURE--PHYSIOLOGICAL EFFECT)

GRISHIN, S.I.

Criticism of Craigie's method of phage typing of Bact. typhi
abdominalis by VI-bacteriophages. Vop.kraev.pri. no.4:39-45 '54.
(BACTERIOPHAGE) (MLRA 9:12)
(EBERTHELLA TYPHOSA)

DRENNOVA, K. A., prof.; GRISHIN, S. I., prof.; MARTYSENKO, I. I.;
DADAMUKHAMEDOV, A. N.; IBRAGIMOV, R. I.; AMILOVA, A. A.; FEL'DMAN, F. Ya.;
MESHKOVA, N. P.; SHENKER, D. I.

Condition of the ears nose and throat in children of preschool age
in Tashkent. Vest. otorin. no. 3: 60-62 '61. (MIRA 14:12)

1. Iz Otorinolaringologicheskoy kafedry (zav. - prof. K. A. Drennova)
Tashkentskogo Instituta usovershenstvovaniya vrachev.

(TASHKENT--OTOLARYNGOLOGY)

L 27470-66

ACC NR: AP6007849

and 6 l/min of liquid hydrogen. Cooling with nitrogen produced a weaker field. Such solenoids can be fed from storage batteries or rectifiers without special filters, and are cheaper to manufacture than solenoids of pure aluminum wire or superconducting solenoids. Orig. art. has: 2 figures.

SUB CODE: 09, 14/ SUBM DATE: 05Jan65/ ORIG REF: 001

Card

2/2 BLG

L 27470-66 EWT(1) IJP(c) JW
ACC NR: AP6007849 SOURCE CODE: UR/0120/66/000/001/0227/0227

AUTHORS: Grishin, S. F.; Glasov, B. V.; Grishina, Ye. Ya. 26
B

ORG: none

TITLE: Cooled coils to obtain stationary magnetic fields

SOURCE: Pribery 1 tekhnika eksperimenta, no. 1, 1966, 227

TOPIC TAGS: solenoid, magnet, cryogenic liquid cooling

ABSTRACT: This is a continuation of earlier research on producing a stationary magnetic field by means of coils cooled with liquid hydrogen (Zh. tekhn. fiz. v. 34, no. 4, 459, 1961). The present solenoid construction consists of free-standing coils of commercial copper wire of 0.8 mm diameter, cooled by freely boiling liquid hydrogen or nitrogen. The copper wires were interlined with pressboard in a manner to produce channels for the liquid to flow inside the solenoid. Cooling decreased the resistance of the wire by a factor of 94, which could be higher were the copper purer. A coil with 25000 turns, inside diameter 5 cm, outside diameter 26 cm, 22.5 cm long, and with a filling factor of 0.58 produced a magnetic field of 30 kG (current 26 amp), consuming 3 kw of electricity

Card 1/2 UDC: 538.244.2:621.318.371 2

BOROVIA, Ye.S. [Hryshyna, O.IA.]; GRISHINA, Ye.Ya. [Hryshyna, O.IA.];
GRISHINA, Ye.Ya. [Hryshyna, O.IA.]

Antibiotic demagnetization of ferric ammonium sulfate
thermal insulation. Ukr. fiz. zhurn. 8 no.9:1013-1017, 1963.
(MIRA 17:2)

1. Fiziko-tehnicheskii institut Ak. UkrSSR, Kiev'kov.

Investigation of possibility of obtaining ... S/781/62/000/000/031/036

The increase rises with the Reynolds number. In the case of natural convection the heat load is approximately 0.2 watt/sq.cm and rises to 0.45 watt/sq.cm when liquid-hydrogen cooling is used. For a coil with inside diameter 2.2 cm, o.d. 7 cm, and length 6.2 cm a field of 43 kOe was maintained about 1 second, and 34 kOe was maintained more than 10 seconds. By replacing the winding in this coil with one made of pure aluminum and by lengthening the coil, a theoretical value of 80 kOe is attainable. Larger coils should yield not less than 100 kOe.

Card 2/2

S/781/62/000/000/031/036

AUTHORS: Borovik Ye. S., Busol F. I., Grishin S. F.

TITLE: Investigation of possibility of obtaining stationary magnetic fields in coils cooled with liquid hydrogen

SOURCE: Fizika plazmy i problemy upravlyayemogo termoyadernogo sinteza; doklady I konferentsii po fizike plazmy i probleme upravlyayemykh termoyadernykh reaktsiy. Fiz.-tekhn. inst. AN Ukr. SSR. Kiev, Izd-vo AN Ukr. SSR, 1962. 148

TEXT: The possibility is discussed of reducing the energy consumed in the production of large stationary magnetic fields with the aid of coils made of pure copper and aluminum, cooled with liquid hydrogen. For the purest commercial aluminum the power excited in the cooled coil decreases by about 500 to 1000 times. The overall gain in energy, with allowance for modern liquefaction equipment, is five-fold. The maximum heat loads were investigated under different cooling conditions for coils made of copper wire, the resistance of which is 100 times less at 20.4°K than at room temperature. Passage of liquid hydrogen through the coil increases the heat removal by several times compared with natural convection.

Card 1/2

Study of the possibility of ...

S/057/61/031/004/010/010
8125/2202

There are 7 figures, 2 tables, and 11 references: 5 Soviet-bloc and 6 non-Soviet-bloc. The two most recent references to English-language publications read as follows: V. G. Volotskaya, Nucleonics, 17, 147, 1959, H. K. Laquer, a. E. F. Hammel. Rev. Sci. Instr., 30, 675, 1959.

SUBMITTED: March 7, 1960

Card 5/9

11514

Study of the possibility of ...

S/057/61/031/004/010/010
P125/B262

convection, the critical thermal stresses and the corresponding maximum field strengths are essentially lower. Thus, in coil CII a delay time of ~ 1 sec corresponds to a field strength of 31,000 oersteds, and $\tau \sim 10$ sec corresponds to 26,000 oersteds. In the hydrogen flow the thermal loads are independent of distribution which is not the case for natural convection. The main results of the experiments are shown in Table 2; they correspond to a pressure gradient of from 0.4 to 0.5 atmospheres. The thermal stresses in natural convection are about twice as low as in hydrogen flows under pressure. In all coils the critical thermal loads were considerably lower than in the preliminary experiments with one single slit. Besides, the values of q are gradually reduced when instead of coil CI, coils CII and CIII are used. The Reynolds numbers for CI, CII, CIII are 3500, 1000, and 500, respectively. These diverging experimental results are probably not due to the different construction of the coils but to the different conditions of circulation of hydrogen. With high-purity commercial aluminum, field strengths of up to 100,000 oersteds can be attained with coils of ~ 1 m. The liquid hydrogen necessary for such a solenoid cannot be provided for even by the most up-to-date methods of liquefaction.

Card 4/9

22504

3/057/61/031/004/010/018
B125/B202

Study of the possibility of ...

and the necessary pressure of the hydrogen vapors is produced by means of the heater 12. At a given instant valve 10 is opened and the current passing through the coil is switched on. A maximum current of 50 a passed through the coils. Results of experiments. Fig 3 shows typical oscillograms for the amperage and the voltage in coil CIII. The initial "flash-up" of the voltage and the relatively slow increase of the amperage (~ 1.5 sec) are due to the inductivity of the coil. Figs. 4 and 5 show the time dependence of the magnetic field strength for the coils CII and CIII in the experiments with circulating hydrogen at different thermal stresses. A field strength of 43,000 oersteds was attained in the center of the coil with supercritical operation for a duration of time τ of the order of magnitude of one second; if the field strength was reduced to 36,000 oersteds, τ was 3 sec and 34,000 oersteds could be maintained for ~ 10 sec. On further reduction of the field strength by some percents, a steady state was observed. In coil CIII the maximum attainable field strength of 24,000 oersteds could be maintained for ~ 1 to 2 sec; 19,500 oersteds could be maintained for 10 sec, and 16,000 oersteds for an infinitely long period. In this case $q_{cr} = 0.24 \text{ watt/cm}^2$. With natural

Card 3/9

252

C/10/10/04/004/010/018
R11/5202

Study of the possibility of

can be rendered more easy. As stated in the introduction, at present only liquid hydrogen is suited for cooling the coils. Details of the first group Cu, Ag, Au in which only the electrical resistance decreases linearly with the field strength as well as alkali metals, indium and aluminum are suited. Cu and Al proved to be most suited for practical purposes. The energy consumed in the production of the magnetic field can be reduced by about one fifth by using high-purity commercial aluminum. By improving the cooling machines and increasing the purity of the metal this ratio can be improved. The experiments were made with apparatus I and II (see Figs. 1, 2) with artificial flow of liquid hydrogen in apparatus I also with natural convection of hydrogen. If the critical stress is exceeded the resistance of the coil rapidly increases as a result of its heating. The solenoid of the first kind (SI) consisting of 18 double wire disks and 1520 windings. The solenoid of the second kind (SII) consisted of 48 double wire disks with altogether 750 windings. Fig. 2 shows the scheme of apparatus II. After a previous cooling of the balloon and the coil to the boiling temperature of liquid nitrogen, about 15 to 20 l of liquid hydrogen are pressed into balloon 4, and 5 to 7 l into balloon 5. Balloon 4 is separated from the coil holder by a valve

Card 2/9

21-01

21.4230 21.1200
21.4240

01/02/01/01/004/010/010
R000/R001

AUTHORS: Borovik, Ya. S., Buzov, F. I., and Grishin, S. F.

TITLE: Study of the possibility of producing steady magnetic fields in liquid hydrogen-cooled coils

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 31, no. 4, 1951, 469-466

TEXT: The authors attempted to determine the maximum admissible thermal stress as well as to find rational constructions of the coils and of methods for their cooling. Furthermore, they demonstrate that a large amount of energy can be saved by cooling the coils used for the production of magnetic fields. This, however, is only possible with $A/Q < R_{300}/R_T$

In this case, A denotes the energy to be consumed for cooling, $Q = I^2 R_{300}$ Joulean heat liberated in the coil, R_{300} the resistance at room temperature, and R_T the resistance at the very low operational temperature of the coil

By saving part of the energy consumed in the production of the magnetic field the realization of a thermonuclear reaction with usable energy yield

Card 1/9

81682

Elasticity of Nitrogen- and Hydrogen Vapors at Low S/057/60/030/05/11/014
Pressures B012/B056

dependence of the elasticity of the vapors on temperature. It is shown that the hydrogen final vacuum may be increased in a helium condensation pump by pumping out the vapors above the liquid helium and reducing the temperature of the pump-surface. Table 3 shows the possibility of improving the final vacuum in this manner. In conclusion it is shown that the method described makes it possible, for the purpose of measuring vapor elasticity at low pressures, to measure vapor pressures up to 10^{-9} - 10^{-10} torr. Measurement of the dependence of the elasticity of hydrogen vapors on temperature was carried out within the range of $1 \cdot 10^{-9}$ - $1.8 \cdot 10^{-6}$ torr, and that of the nitrogen vapors was carried out within the range of $1.1 \cdot 10^{-10}$ - $3.2 \cdot 10^{-7}$ torr. There are 3 figures, 3 tables, and 8 references: 3 Soviet, 4 English, and 1 German.

ASSOCIATION: Fiziko-tekhnicheskii institut AN USSR Khar'kov (Institute of Physics and Technology of the AS UkrSSR, Khar'kov)

SUBMITTED: August 11, 1959

Card 2/2

✓

81682

S/057/60/030/05/11/014
B012/B056

54210

AUTHORS: Borovik, Ye. S., Grishin, S. F., Grishina, Ye. Ya.

TITLE: Elasticity of Nitrogen and Hydrogen Vapors at Low Pressures 21

PERIODICAL: Zhurnal tekhnicheskoy fiziki, 1960, Vol. 30, No. 5,
pp. 539 - 545

TEXT: For the purpose of determining the elasticity of nitrogen- and hydrogen vapor at low pressures, a method of direct pressure measurement of the saturating vapors was here applied. This method consisted in the following: The gas under investigation is condensed in a high vacuum on a cooled surface; after the end of condensation and after a certain period of waiting for the establishment of equilibrium in the free volume, such a pressure is adjusted on the surface, at which the rate of condensation is equal to the rate of evaporation in the substance under investigation. Fig. 1 shows the scheme of the device used, which is also described. Pressure- and temperature measurement as well as determination of the elasticity of the hydrogen- and nitrogen vapors are described. Figs. 2 and 3 give the measurement results, and Tables 1 and 2 show the

Card 1/2

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69091

S/120/60/000/01/035/051

On the Ultimate Vacuum of Condensation ^{EQ32/E314} Pumps

helium was employed as the cooling agent.
There are 1 figure and 4 references, 3 of which are
Soviet and 1 is English.

ASSOCIATION: Fiziko-tekhnicheskii institut AN SSSR (Physico-
engineering Institute of the Ac.Sc., Ukrainian SSR)

SUBMITTED: January 19, 1959

Card 4/4

69091

S/120/60/000/01/035/051

EO32/E314

On the Ultimate Vacuum of Condensation Pumps

apertures was less than 100 litres/sec and hence the region inside the screen 8 could be looked upon as corresponding to the ultimate vacuum of the condensation pumps, provided the pressure outside this region was about 10^{-8} mm Hg. Two manometers were employed, namely 12 and 13. In order to reduce the evaporation of helium between the manometer 13 and the sphere 10, provision was made for a narrow copper screen 14. The low pressures were measured with standard ionization manometers, type LM2. These manometers can measure pressures down to 5×10^{-9} mm Hg. An Alpert gauge (Ref 3) was used to measure the very low pressures. It was found that a vacuum of 10^{-10} mm Hg could be obtained in all experiments with liquid-hydrogen filled condensation pumps. The lowest pressure (1.2×10^{-10}) was achieved after a 10-day pumping with liquid nitrogen in all the traps. A pressure of 1.2×10^{-11} mm Hg was obtained when liquid

Card3/4

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69091

S/120/60/000/01/035/051

E032/E314

On the Ultimate Vacuum of Condensation Pumps

The polished copper screen 5, which was in the form of a cylinder and surrounded the working region, was also nitrogen-cooled with the aid of the dewar 6. In addition, there was a liquid nitrogen cooled venetian-blind type trap 7. Inside the screen 5 there was a polished cylindrical screen 8, made of copper with a liquid-hydrogen filled sphere 9 attached to it. The screen 8 and the sphere 9 form a fast condensation pump. The space inside the screen 8 was thus surrounded by walls cooled down to liquid-hydrogen temperatures and the rate of pumping for nitrogen within this space was 30 000 litres/sec. The sphere 10 inside the screen had a diameter of 155 m and could be filled with liquid hydrogen or liquid helium. The calculated pumping speed for nitrogen by the sphere 10 was 8 000 litres/sec. The space inside the screen 8 was thus isolated from the remaining part of the apparatus except for apertures whose total areas was about 10 cm^2 . The rate of leakage of air through these

Card2/4

✓

5.1600 5.1330
5.1400
5.1180

69091

S/120/60/000/01/035/051

E032/E314

AUTHORS: Borovik, Ye.S., Grishin, S.F. and Lazarev, B.G.

TITLE: On the Ultimate Vacuum of Condensation Pumps 1

PERIODICAL: Pribery i tekhnika eksperimenta, 1960, Nr 1,
pp 115 - 118 (USSR)

ABSTRACT: The present paper is concerned with the determination of the ultimate vacuum of a hydrogen condensation pump and the possibility of using liquid helium to improve this ultimate vacuum. Since it was expected that in order to achieve the ultimate vacuum it is essential to exclude the penetration into the vacuum chamber of the oil diffusion pump vapour, a special apparatus was built in which all possible steps were taken to minimise this effect. A schematic drawing of the apparatus employed is shown in Figure 1. The apparatus was placed in a 40-litre vessel 1. The vessel was evacuated by the oil diffusion pump 2. The system was isolated from the oil-diffusion pump by the liquid nitrogen cooled vapour trap 3. On the low vacuum side, the oil-diffusion pump was evacuated by a two-stage mercury-diffusion pump incorporating a liquid nitrogen trap.

Card1/4

4

AID P - 2707

Subject : USSR/Mining

Card 1/1 Pub. 78 - 4/27

Author : Grishin, S. F.

Title : Deficiencies in planning and financing of drilling
and completion of oil wells

Periodical : Neft. khoz. v. 33, #6, 10-13, Je 1955

Abstract : This article is one of the answers to the article of
N. I. Avloshenko "It is definitely necessary to
improve the order of planning and of financing of
drilling work" published in this journal #12, 1954
in which the forms to be filled in cost estimating
of drilling and completion of oil wells are discussed.

Institution : None

Submitted : No date

L 08578-67

ACC NR: AP6033492

0

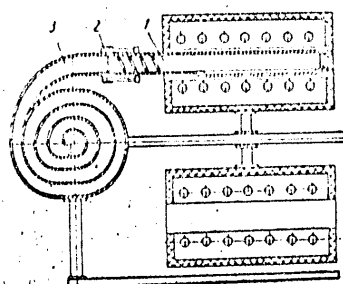


Fig. 1. Shock tube

1 - Test section; 2 - membrane;
3 - section for initiating det-
onation.

SUB CODE: 21/ SUBM DATE: 08Jun65

Card 2/2

L 03573-67 EMP(m)/EWT(1)/EWT(m) WW/JW/JWD/WE

ACC NR: AP6033492

SOURCE CODE: UR/0413/66/000/018/0115/0115

INVENTOR: Grishin, S. D.; Gusev, V. I.; Denisov, Yu. N.; Mironov, S. G.; Serbinov, A. I.; Troshin, Ya. K. 52

ORG: none 8

TITLE: Shock tube for determining the ignition induction period of combustible mixtures. Class 42, No. 186166

SOURCE: Izobret prom obraz tov zn, no. 18, 1966, 115

TOPIC TAGS: shock tube, fuel ignition, fuel ignition induction period, air fuel combustion

ABSTRACT: The proposed shock tube for determining the ignition induction period of combustible mixtures contains a test section and a section separated by a membrane for initiating the detonation. In order to decrease the size of the shock tube, the section for initiating the shock is made in the form of a helix (see Fig. 1). Orig. art. has: 1 figure.

[WA No. 68]

Card 1/2

UDC: 534.222.2.002.51

GRISHIN, S., polkovnik; IVANOV, P., polkovnik; ZNOBIN, I., polkovnik

"Control of small units in modern battle" by V.A.Tumas. Reviewed
by S.Grishin, P.Ivanov, I.Znoblin. Voen. vest. 43 no.6:125-126
Je '63. (MIRA 16:6)

(Tactics)
(Tumas, V.A.)

GRISHIN, P.V.

Effect of increased concentrations of absorbed magnesium on soil properties. Nauch. dokl. vys. shkoly; biol. nauki no.4:198-201 '59. (MIRA 12:12)

1.Rekomendovana kafedroy pochvovedeniya Kazanskogo gosudarstvennogo universiteta im. V.I. Ul'yanova-Lenina.
(Solonetz soils) (Magnesium)

VINOKUROV, M.A.; GRISHIN, P.V.

Effect of the replacement of linden-spruce stands by a succeeding
linden-goutweed association on soil formation processes. Uch.zap.
Kaz.un. 114 no.1:135-161 '54. (MLRA 10:3)

1. Kafedra pochvovedeniya.
(Forest influences)(Raifa region--Soil chemistry)
(Spruce) (Linden)

GRISHIN, P. V.

"Soils of the half Forest Woodland." Kazan Biol Sci, Kazan State U,
Kazan' 1954. (RZhBiol, No 8, Dec 54)

Survey of Scientific and Technical dissertations defended at USSR
Higher Educational Institutions (12)
SC: Sum. No. 556, 24 Jun 55

GRISHIN, Pinkhos Izrailevich; DEULINA, G.P., retsenzent; BARABANOV, L.G.,
retsenzent; SOKOLOVA, V.Ye., red.; SHVETSOV, S.V., tekhn. red.

[Automatic stops for textile machinery] Samoostanovy tekstil'nykh
mashin. Moskva, Izd-vo nauchno-tekhn. lit-ry RSFSR, 1961. 138 p.
(MIRA 14:7)

(Textile machinery) (Automatic control)

KOVALEV, Nikolay Ivanovich; GRISHIN, Petr Dmitriyevich; KAGANOVA,
A.A., red.

[Technology of food preparation] Tekhnologiya prigotovle-
niia pishchi. Izd. 3., isp. i dop. Moskva, Ekonomika,
1964. 367 p. (MIRA 17:4)

GRISHIN, P.A., kand. ekonomicheskikh nauk

For successful fulfillment of the decisions of the 23rd
Congress of the CPSU. Izv. vys. ucheb. zav. i nauch. i gos.
5 no. 1:3-5 '62. (MIRA 16:11)

Grishin, P D

N/5
722.31
.33
1955

Frakticheskiye raboty po tekhnologii prigotovleniya pishchi /Practical
work on the technology of the production of food/ Izd. 2, Dopol. 1 per. r.
Moskva, Gostorgizdat, 1955.

206 p.

GRISHIN, P.

Nicolaus Copernicus. Geog. v shkole no.6:6-10 N-D '53. (MLRA 6:12)
(Copernicus, Nicolaus, 1473-1543)

GRISHIN, O. N.; YASNIKOV, A. A.

Kinetics and mechanism of the addition of weak acid anions to N-benzyl-1,4-dihydronicotinamide. Ukr. khim. zhur. 28 no.6:707-713 '62. (MIRA 15:10)

1. Institut organicheskoy khimii AN UkrSSR.

(Acids) (Nicotinamide)

L 20599-66

ACC NR: AP6010833

The reaction rate depends only slightly on the temperature, and the temperature factor is equal to unity in some individual cases. Orig. art. has: 6 figures and 2 tables. [VS]

SUB CODE: 07/ SUBM DATE: 11Nov64/ ORIG REF: 010/ OTH REF: 013/ ATD PRESS:

427.6

Card

212

BK

L 20599-66 EWT(m)/EWP(j)/T/ETC(m)-6 WW/RM

ACC NR: AP6010833

SOURCE CODE: UR/0073/66/032/003/0260/0268

AUTHOR: Chernyavskiy, G. V.; Dvorko, G. F.; Shrubovich, V. A.; Grishin, O. M. 34
10

ORG: Institute of Organic Chemistry, AN UkrSSR (Institut organicheskoy khimii AN UkrSSR)

TITLE: Reactivity of cycloolefins in addition reactions. 1. Kinetics and mechanism of iodine addition to cyclohexene in dimethylformamide

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 32, 1966, 260-268

TOPIC TAGS: reaction mechanism, reaction kinetics, cyclohexene

ABSTRACT: Cycloolefins are promising monomers for the production of heat-resistant polymers. The relationship between their reactivity and their structure has not been studied sufficiently to date. The purpose of the present work was to study the reactivity of the double bond in cycloolefins toward heterolytic addition, in relation to the structure of the unsaturated compound. It was found that the addition of iodine to cyclohexene is an equilibrium process described by the kinetic equation:

$$v = k_3[C_6H_{10}][I_2]^2 - k_2[C_6H_{10} \cdot I_2][I_2].$$

The diiodide generated decomposes slowly into iodocyclohexene and HI. The equilibrium $I^- + I_2 \rightleftharpoons I_3^-$ in dimethylformamide is displaced almost entirely to the right.

Card 1/2

YASNIKOVA, A.A.; GILMAN, Y.G.A.; GILMAN, A.D.

Reaction of benzaldehyde with α -chloroacetaldehyde in the presence of α -chloroacetaldehyde in alkaline solution. *Chem. Abstr.* 1961, 56: 15113d. (USSR 14-5)

1. *Chem. Abstr.* 1961, 56: 15113d.

VAYNSHTEYN, F.M.; SHILOV, Ye.A.; GRISHIN, O.M.

Hydrogen isotope effect in the halogenation of aromatic compounds.
Zhur. VKHO 5 no.1:119-120 '60. (MIRA 14:4)

1. Institut organicheskoy khimii AN USSR.
(Aromatic compounds) (Halogenation)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000616900017-6

STRONGIN, G.M.; PISAREV, K.Ye.; ABREIMOV, P.G.; GRISHIN, N.T.; SHISHKINA, A.I.

Zinc phosphide. Patent U.S.S.R. 78, 450, Dec. 31, 1949.
(CA 47 no.20:10816 '53)

All-Union Conference on the utilisation of ultrasonics in industry. (Cont.) 65-4-12/12

ultrasonics for the control of crystallisation of paraffinic petroleum products in refining, Sizov, v.P., Eng., communicated on the application of ultrasonics for the control of the quality of petroleum products during pumping in pipelines. Kalugina, Yu. P., Eng., communicated on the design of an acoustic viscosimeter for highly viscous products. Novitskiy, B. G., communicated about an ultrasonic apparatus for the determination of physico-mechanical properties of some high-molecular materials. Leybenzov, B.I., Eng., communicated about an ultrasonic apparatus for mine surveying.

Card 3/3

AVAILABLE:

All-Union Conference on the utilisation of ultrasonics in industry.(Cont.)

65-4-12/12

ultrasonic cavitation. A number of papers on ultrasonic cleaning of parts and etching of surfaces were given. Mednikov, E.P.Cand. Tech.Sc., and Nikolayev, V.Yu. communicated about an apparatus for the prevention of boiler scale and other sediments. Polotskiy, I.G. Prof., indicated the role of cavitation in the processes of formation of oil-water emulsions and dispersion of metals by ultrasonics. Novitskiy, B.G. Ing., gave a paper on the production of stable emulsions and fine suspensions using hydrodynamic and magnetostriction vibrators and the design of an ultrasonic industrial dispergator. Podeshevnikov, B.F., Ing., and Tsetlin, V.M.Cand.Chem.Sc. communicated on sonic coagulation of aerosols and its industrial application. Mednikov, E.P. Cand.Tech.Sc., also spoke on the same subject. Ermilov, A.S.Ing.(VNII NP) gave a paper on the use of ultrasonics in the production of greases. Communications on the subject of the influence of ultrasonics on crystallisation and solution processes were made by: Kapustin A.P. Prof., Bagdasarov, Kh.S. Prof., Teumin, I.I., Beniyeva, T.Ya., Cands.Phys-math Sc., and Polotskiy, I.G. Prof. Of special interest was the work of Rabinovich, I.K., Ing., on an ultrasonic apparatus for soldering aluminium. Kalashnikov N.V.Ing., has shown that the use of vibration in preheaters can increase heat transfer ten times. The author of this review presented a paper on the application of

Card 2/3

AUTHOR: Grishin, N.P.

65-4-12/12

TITLE: All-Union Conference on the utilisation of ultrasonics in industry. (Vsesoyuznaya konferentsiya po ispol'zovaniyu ul'trazvuka v promyshlennosti.)

PERIODICAL: "Khimiya i Tekhnologiya Topliva i Masel" (Chemistry and Technology of Fuels and Lubricants) 1957, No. 4, pp. 70-72 (USSR)

ABSTRACT: The conference took place on April 15-20, 1957 in Moscow. It was organised by Gostekhnika SSR together with the presidium of the Academy of Science and F.E. Dzerzhinskiy's House of Technico-Scientific propaganda. More than 90 papers and communications were read. Many papers on the subject of ultrasonic detection of defects, use of ultrasonics in technological processes, ultrasonic apparatus and measurements were given. An important paper entitled "Physical basis of industrial applications of ultrasonics" was given by Brekhovskikh, L.M. Member-corresp. of Ac.Sc., Krasilnikov, V.A. Prof., Dr. of Phys.-math.Sc., Nozdorev, V.F. Prof. Dr. of Phys.-math.Sc., and Rozenberg, L.D. Prof. Dr. Tech.Sc. The other important papers were: "Application of ultrasonics in industry" by Shrayber, D.S., Cand. Tech.Sc. (VIAM); "Physico-chemical action of elastic vibrations in the sonic and ultrasonic ranges of frequencies and possibilities of their utilisation in various production processes." by Fridman, V.M. Cand. Chem.Sc. Roy A.N. Cand. Phys.-math.Sc. delivered a paper on the appearance and course of

Card 1/3

GRISHIN, N.K.

Organizing cattle fattening based on food industry wastes.
Spart.prom. 27 no.4:43 '61. (MIRA 14:6)
(Cattle--Feeding and feeds)

GRISHIN, N.K.

First results of the work of the operational and technical
council. Spirt.prem.22 no.1:26-27 '56. (MIRA 9:7)

1.Nove-Lyadinskiy spirtovyy zavod.
(Distilling industries)

L 1672-66

ACCESSION NR: AP5018436

10
facilities, which includes some 200 stations, is outlined. The coordinating center is in the Institute of Physics and Astronomy of the Estonian Academy of Sciences in Tartu, under the direction of Ch. I. Villman. Additional research centers are located in Riga, Tallin, Leningrad, Smolensk, Moscow, Tomsk, Ryazan, Ulyanovsk, and Novosibirsk. Orig. art. has: 3 figures. [DM]

ASSOCIATION: VAGO

SUBMITTED: 00

ENCL: 00

SUB CODE: ES

NO REF SOV: 000

OTHER: 000

Card

2/2

DP

L 1672-66 EWT(1)/FCC GW

ACCESSION NR: AP5018436

UR/0384/65/000/003/0027/0033

AUTHOR: Grishin, N. I. (Scientist-secretary)

26
16
E

TITLE: Secret of the middle latitudes

SOURCE: Zemlya i Vselennaya, no. 3, 1965, 27-33

TOPIC TAGS: noctilucent cloud, luminous cloud, twilight phenomenon, cosmic dust, meteoric particle 12

ABSTRACT: Various Soviet and non-Soviet theories as to the nature, distribution, and morphology of noctilucent clouds are reviewed. The joint Swedish-American rocket investigations of noctilucent clouds are said to have confirmed theories advanced by Khvostikov and others. The U. S. Saturn experiment of 27 October 1961, in which 86 tons of water were released at a height of 100-150 km, added little to our knowledge of the nature of noctilucent clouds, inasmuch as the clouds are never observed in those latitudes at which the experiment was conducted. Soviet time-lapse photography conducted since 1953 shows definite types of noctilucent cloud development. These are: 1) the crepe-like stage in which the clouds seen formless and wispy; 2) the band and streamer stage; 3) the wave-like forms; and 4) the vortex formations. The organization of Soviet noctilucent cloud research

Card 1/2

Noctilucent cloud problem ...

S/169/62/000/007/136/149
D228/D307

into noctilucent cloud studies was undertaken. The regular holding of special interdepartmental conferences was of great organizing and scientific significance. For carrying out many-sided instrumental investigations much work on designing and applying special recording equipment was undertaken at the All-Union Astro-Geodetic Observatory. The sections of the All-Union Astro-Geodetic Observatory obtained much observational material in the IGY and IGC periods. [Abstracter's note: Complete translation.] ✓

Card 2/2

S/169/62/000/007/136/149
D228/D307

AUTHOR: Grishin, N. I.

TITLE: Noctilucent cloud problem in operations at the Vsesoyuznyy Astronomichsko-geodesicheskaya observatoriya (All-Union Astro-Geodetic Observatory (Discourse theses)

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 7, 1962, 22, abstract 7G139 (Tr. 3-go s"yezda Vses. astron-geod. o-va, 1960, M., AN SSSR, 1962, 162-164, Diskus. 165-168)

TEXT: In the preparatory period before the IGY began the All-Union Astro-Geodetic Observatory initiated the staging of regular international noctilucent-cloud observations. The All-Union Astro-Geodetic Observatory developed a detailed program for noctilucent cloud observations in the IGY period and published instructions for carrying out regular patrol observations. Much organizational work on bringing special astronomic and geophysical institutions

Card 1/2

1
Observations of noctilucent clouds ... S/169/63/000/001/008/062
P263/D3Q7
for the International Year of the Quiet Sun, which will cover 2
seasons of noctilucent cloud observations,
[Abstracter's note: Complete translation.]

Card 2/2

S/169/63/000/001/008/062
D263/D307

AUTHOR: Grishin, N.I.

TITLE: Observations of noctilucent clouds in various
departments of ВАГО (VAGO)

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 1, 1963, 33,
abstract 1A166 (Tsirkulyar Vses. astron-geol. o-va,
1962, no. 5, 35-38)

TEXT: An account is given of the program drawn up for the
observation of noctilucent clouds, both by the various departments
of VAGO and by amateur investigators: (1) study of the seasonal and
annual course of the frequency of noctilucent clouds, (2) study of
the height distribution of morphological formations during each ob-
servation, (3) study of the morphological changes and movements of
noctilucent clouds, (4) study of the spectral and polarizing proper-
ties of light scattered by individual formations and by the entire
field. It is noted that 1962-1963 will be a preparatory period
(training of observers and the development of instruments and methods)

Card 1/2

ASTAPOVICH, I.S.; BAKULI, P.I.; BAKHAEV, A.M.; BRONSHTEIN, V.A.; BUGOSLAVSKAYA, N.Ya. [deceased]; VASIL'YEV, O.B.; GRISHIN, N.I.; DAGAYEV, M.M.; DUBROVSKIY, K.K. [deceased]; ZAKHAROV, G.P.; ZOTKIN, I.T.; KAPITAN, Ye.M.; KIRILOV, Ye.L.; KULIKOVSKIY, P.G.; KUNITSKIY, R.V.; KUROCHKIN, A.Ye.; ORLOV, S.V. [deceased]; POPOV, P.I.; PUSHKOV, N.V.; RYBAKOV, A.I.; RYABOV, Yu.A.; SYTINSKAYA, M.N.; TSENEAICH, V.P.; SHCHIGOLEV, B.M.; VORONTSOV-VEL'YAMINOV, B.A., red.; POCHTAJEVA, G.A., red.; KRYUCHKOVA, V.N., tekhn. red.

[Astronomical calendar; permanent part] Astronomicheskii kalendar'; postoiannaya chast'. Izd. 5., polnost'iu perer. Otv. red. I.I. Bakulin. Red. kol. V.A. Bronshten i dr. Moskva, Gos. izd-vo fiziko-matem. lit-ry, 1962. 771 p. (MIRA 15:4)

(Astronomy--Yearbooks)

GRISHIN, N.I.

The seventh conference on noctilucent clouds. Astron. tsir.
no. 222:33-34 My '61. (MIRA 15:4)

(Clouds)

Study of "luminous clouds"

S/030/61/000/009/011/013
B105/B101

Studies in the southern hemisphere will give information on the frequency of the phenomena, the altitude of formation, and the motion of these clouds. By collecting experimental data on luminous clouds from all over the world, and by generalizing them for the theory, solutions may be found for problems of the physics of the atmosphere not only on our own planet but on Jupiter and Saturn as well.

Card 3/3

Study of "luminous clouds"

S/030/61/000/009/011/013
B105/B101

held in Tallin on May 16-19, 1961. I. A. Khvostikov reported on a critical analysis of latest data available in the literature on temperature, pressure, and other physical characteristics of the upper strata of the atmosphere. I. A. Khvostikov's hypothesis concerning the water nature of luminous clouds has been repeatedly confirmed. Yu. V. Kurilova and N. I. Novozhilov reported on an analysis of aerosynoptic material. Studies of the optical properties of luminous clouds (V. V. Sharonov, T. M. Tarasova, O. B. Vasil'yev, Ch. I. Villmann) yielded data as to their brightness, their polarization properties, and the dimensions of their particles. Similar data for longer periods (15 - 20 years) are lacking, and the knowledge of luminous clouds over the Atlantic and the Pacific, East Siberia, and Canada is insufficient. Observations of these clouds on the southern hemisphere have been neglected altogether. The usefulness of additional studies on the subject during the International Year of the Quiet Sun, 1964-1965, was emphasized. The Vsesoyuznoye astronomo-geodezicheskoye obshchestvo (All-Union Astronomic-geodetic Society) made preparations in 1961 for the IYQS and, following a suggestion of the Estonian Department, sent a group of observers on board an expedition vessel to study luminous clouds in the western parts of the Atlantic.

Card 2/3

S/030/61/000/009/011/013
B105/B101

AUTHOR: Grishin, N. I.

TITLE: Study of "luminous clouds"

PERIODICAL: Akademiya nauk SSSR. Vestnik, no. 9, 1961, 125-126

TEXT: Luminous clouds have represented a particular problem within the Soviet national program for the International Geophysical Year. The clouds in question form relatively thin strata (~1 - 3 km) and float at an average altitude of 82 km with deviations of $\pm 5-7$ km. I. S. Astapovich noted that this altitude is subject to daily variations. A comprehensive photogrammetric method, which included slow-motion photography, was applied to study these clouds in 1953 for the first time by N. I. Grishin. Special observations were made by over 200 stations of the hydrometeorological service throughout the USSR territory in the IGY period. Data obtained were evaluated under the supervision of V. V. Sharonov. As from 1956, organizational problems and research results on the subject have been discussed at special interdepartmental conferences. The seventh conference of this kind was Card 1/3

The question of the ...

S/169/62/000/000/000/000
D/23/0001

moves northwards into the region of moist air. The upper boundary of the stratosphere ascends by about 10 km. In the stratosphere's high layers conditions are created that are close to those of cloud-formation. More active anticyclonic activity in the troposphere completes by means of wave disturbances the creation of the conditions necessary for the formation of noctilucent clouds. [Abstractor's note: Complete translation.]

Card 6/6

The question of the ...

S/169/62/000/003/000/000
D223/D301

of more than 500%. The actual effect of this variable quantity on the atmosphere experiences still greater fluctuations under the influence of the adjoining zones of polar and tropical climates. Hence sharp seasonal variations in the atmosphere's structure and main properties can be expected precisely in the middle latitudes. A temperature break exists almost continuously at the boundary between the high equatorial and the low polar tropopause. On an average this break is situated in latitude 45 - 50°. The intense exchange between the troposphere and the stratosphere is accomplished by air masses across the break. It may be assumed that water-vapor can thereby penetrate into the stratosphere and be carried away upwards by air currents. It is known from indirect data that in winter the stratosphere's height is lower than in summer. It may be supposed that I. A. Khvostikov's diagram is then incomplete in respect of what is necessary for the formation of noctilucent clouds. The dynamic disturbances of the troposphere's baric formations are also inadequate for creating the conditions necessary for the formation of clouds in the stratosphere's high layers. With the advent of the warm season the troposphere rises, and the tropopause's break

Card 5/6

The question of the ...

3/169/62/000/003/010/011
D228/D301

place it is a question of the presence of water-vapor and a sufficiently low temperature. The sublimation products of meteor particles may serve as condensation nuclei. Of all the possible mechanisms of atmospheric cooling, adiabatic cooling at the time of wave excitation merits the most attention in this case. Noctilucent-cloud observations confirm the presence of several versions of cloud-formation, which are closely related in their time and parallel course to the disturbing influence of an anticyclone. Moreover, the evolutionary morphology and the location of the cloud projection, which coincides with the course of the most active lines of high-pressure propagation, indicate that there is a certain mechanism for the mutual influence or predetermination of these phenomena. Attempts to understand the causes of the seasonal and latitudinal localization of noctilucent clouds encounter considerable difficulties in consequence of the absence of sufficiently many reliable data about the physical properties of the stratosphere's high layers. It is, therefore, only possible to express conjectural deliberations on this question. It is known that for the middle latitudes the influx of solar energy undergoes seasonal changes over a range

Card 4/6

The question of the ...

3/169/62/000/003/000/000
5228/0301

Cine-surveying confirms the external resemblance of the evolution of wavy types of noctilucent clouds to that of similar clouds in the troposphere. The connexion of noctilucent-cloud appearances with a special combination of anticyclonic activity in the atmosphere is noted. Different kinds of wavy formations are recorded during the appearance of noctilucent clouds. Waves with a length of above 100 km appear to arise under the influence of the wave disturbance created by a moving anticyclone. The disturbance of the anticyclone's ridge may probably "swing" the upper boundary layer of the stratosphere before the formation of extremely long waves with a great amplitude. The adiabatic cooling of the air masses raised to the crest of the wave may then create the necessary conditions for the condensation of cloud particles. It follows from the diagram of I. A. Khvostikov (RZhGeofiz, 1962, 3G134) that the theoretically possible conditions for noctilucent-cloud condensation can only arise at an altitude of 80 - 85 km. At this height the atmospheric pressure may exceed the tension of saturated water-vapor. However, there are not always the conditions that are necessary for cloud formation at altitudes of 80 - 85 km. In the first

Card 3/ 6

The question of the ...

S/169/52/000/003/000/000
D228/D301

the primary, simplest form of noctilucent-cloud existence. It is known that intense air-mass movements occur at heights of 80 - 85 km. The movement of noctilucent-cloud details having the form of bands (type II) indicates the air currents' speed and direction. Very mobile and constantly changing wavy formations (type III) are much more often observed in noctilucent clouds. The wavelength varies widely (5 - 100 km); the speed of propagation comprises 50 - 150 m/sec. Small eddy-like formations (type IV) often appear in the region of laminar flow in the atmosphere's upper layers. Large eddies are comparatively rarely formed. On the basis of the morphology and the kinematic peculiarities of noctilucent clouds it can be concluded that at a height of 80 - 85 km the rarefied environment of the stratosphere's upper layers governs the conditions and the properties of cloud-formation. This explains the size of the wave formations and the velocities of the atmosphere's phase movements and jet streams. The stratosphere's upper boundary (~85 - 90 km) is somewhat structurally and dynamically similar to the tropopause. It is a kind of "stratopause", which is characterized by many properties that result in the formation of noctilucent clouds.

Card 2/6

3.5/20

6247
S/169/62/000/003/090/098
D228/D301

AUTHOR: Grishin, N. I.

TITLE: The question of the meteorologic conditions of noctil-
lucent-cloud appearances

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 3, 1962, 19-20,
abstract 36137 (Tr. VI Soveshchaniya po serebristym
oblakam, 1959, Riga, AN LatvSSR, 1961, 107-140)

TEXT: Data about the wave formations of cloud systems in the at-
mosphere's lower layers are of great significance for the problem
of noctilucous-cloud study. In their morphologic indications noc-
tilucous clouds are divided into four types of formation: I --
veils; II -- bands; III -- crests (waves); and IV -- eddies. Veils
(type I) have some external affinity with cirrus clouds. They usu-
ally represent an uneven, intermittently glimmering glow in a cer-
tain part of the twilight sky, sometimes with barely any marked
fibrous structure. There are grounds for affirming that veils are

Card 1/6

IKAUNIYEKS, Ya.Ya.[Ikaunieks, J.], otv. red.; VILIMANN, Ch.I.[Villmans, C.], red.; GRISHIN, N.I., red.; DLIKIS, M.A., red.; KHVOSTIKOV, I.A., red.

[Transactions of the Sixth Conference on Noctilucent Clouds] Trudy 6go soveshchaniia po serebristym oblakam, Riga, 1961. Riga, Izd-vo Akad.nauk Latviiskoi SSR, 1961. 197 p. (MIRA 15:1)

1. Soveshchaniye poserebristym oblakam, 6th, Riga, 1961. 2. Direktor Astrofizicheskoy laboratorii AN Latviyskoy SSR (for Ikauniyek). (Clouds—Congresses)

Observation of luminous clouds

S/169/61/000/008/037/053
A006/A101

conditions of visibility, problems on the nature of glow of clouds, conditions of their illumination by the Sun etc. These problems are important for the understanding of both the physical nature of particles composing the luminous clouds, and the optical properties of the Earth's atmosphere.

L. Yerasova

[Abstracter's note: Complete translation]

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Card 3/3

Observation of luminous clouds

S/169/61/000/008/037/053
A006/A101

number of luminous cloud occurrence is not constant, but changes from year to year. This also indicates a corresponding variability of average yearly characteristics in high atmospheric layers, determining its state. In the southern hemisphere the luminous clouds were observed only a few times. It follows from singular observations that the girdle of luminous clouds is located in the southern hemisphere in lower latitudes (about $40 - 60^{\circ}$ southern latitude) than in the northern hemisphere. It should be noted that similar latitudinal cloud strips were also observed in outer atmospheric layers of other planets (Jupiter, Saturn, sometimes Mars, possibly Venus). The problem of investigating luminous clouds may be divided into four trends. Trend one is characterized by investigations of the geographical spread and the seasonal recurrence of luminous clouds in the northern and southern hemisphere. Trend two provides for multiple determinations of the altitude of luminous clouds at different latitudes and longitudes of their appearance. Such measurements will yield material on the upper-air location of the luminous cloud layer over large spaces. Trend three is directed to the study of luminous cloud movement, which is methodically connected with studies of determining their altitudes. Trend four combines investigations of optical properties of luminous clouds, i.e. spectral, polarization and reflection properties, their total and spectral transparency, variations of brightness, optical

Card 2/3

S/169/61/000/008/037/053
A006/A101

AUTHOR: Grishin, N. I.

TITLE: Observation of luminous clouds

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 8, 1961, 22-23, abstract 8G168
("Tr. 2-go s'yezda Vses. astron-geod. o-va, 1955", Moscow, AN SSSR,
1960, 134-136, Discussion, 137-139)

TEXT: There is not, until the present, a sufficiently cheap and convenient method for the continuous registration of temperature and pressure in upper atmospheric layers in modern meteorological sounding. Therefore investigations of luminous clouds carried out by proper methods could provide valuable information on the physics of their surrounding medium simultaneously over a surface of several million square kilometers. The latitudinal and seasonal distribution is characteristic of the latitudinal and seasonal heterogeneity of upper atmospheric layers. Such changes in the physical properties of the atmosphere are the result of a definite global-scale atmospheric circulation, which as yet has not been investigated. Therefore there is, in particular, no sufficient explanation of the localization of luminous clouds in the height and latitude. The total yearly

Card 1/3

GRISHIN, N.I.

Wave motions and meteorological conditions of the formation of
noctilucent clouds. Nek.probl.meteor. no.1:117-119 '60.
(MIRA 13:8)
(Clouds)

VILLMANN, Ch.I., red.; GRISHIN, N.I., red.; DIRIKIS, M.A., red.; BOSS,
Yu.K., red.; KHVOSTIKOV, I.A., red.; SKVORTSOVA, A., red.;
TOOMSALU, E., tekhn. red.

[Transactions of the Conference on Noctilucent Clouds]Trudy
Soveshchaniia po serebristym oblakam. 3d, Tallinn, 1961. Tallinn,
Akad. nauk Estonskoi SSR, 1960. 139 p. (MIRA 15:12)

1. Soveshchaniye po serebristym oblakam. 3d, Tallinn, 1961.
(Clouds)

3/153/62/000/000/005/000
0207/0303

AUTHOR: Grishin, I. I.

TITLE: Noctilucent clouds: their movements

SOURCE: Modelirovaniye atmosfery i klimata i gidrosfere;
Prilozheniya k zhurnalovskomu konferentsii 22-26
noyabrya 1960 g. Moscow, Izd-vo AN SSSR, 1962, 58-66

TEXT: The article reviews recent (mainly post-1951) Soviet literature on the origin, formation and noctilucent (silver) clouds observed at heights of 75-80 km. Their motion reflects stratospheric movements of air. It is originally suggested that the flow of water in a shallow channel with a wind acting on its surface may be a suitable model for the motion of noctilucent clouds. There are 8 figures and 9 references.

ASSOCIATION: Institut prikladnykh matematik, AN SSSR (Institute of Applied Mathematics, USSR)

Card 1/1

S/035/65/000/001/011/01P
A001/A001

Fourth Conference on Noctilucent Clouds, Tartu, December 12-14, 1958

In addition to these, were delivered scientific communications of I.S. Astapovich,
V.A. Bronshten, O.B. Vasil'yev, M.A. Dirikis, Yu.-I.K. Veitmann, Ch.L. Villmann,
N.I. Grishin, Ye.Ye. Artemkin, Demidovich, V.Yu. Skul'skiy.

I.S. Shch.-S. ✓

Translator's note: This is the full translation of the original Russian abstract.

S/035/60/000/007/011/018
A001/A001

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1960, No. 7,
p. 74, # 6430

AUTHOR: Grishin, N.I.

TITLE: Fourth Conference on Noctilucent Clouds, Tartu, December 12-14,
1958

PERIODICAL: Astron. tsirkulyar, 1959, sent. 15, No. 204, pp. 19-20

TEXT: This is an information on the interdepartmental conference of various organizations of the USSR, dedicated to the studies of noctilucent clouds according to the program of IGY. The following lectures were delivered: I.A. Khvostikov, On the thermal conditions of the atmosphere in the zone of noctilucent clouds; V.V. Sharonov, On the results of an International Symposium on noctilucent clouds held in Moscow on August 6, 1958; M.I. Burav, On the stereophotogrammetric method of determining the altitudes of noctilucent clouds; V.V. Sharonov, On the problems of observations of noctilucent clouds in 1959.

Card 1/2

83339

S/169/60/000/007/010/016
A005/A001

The Organization of the Investigations of Noctilucent Clouds During the International Geophysical Year

extended time. The comprehensive treatment of this material has not yet been concluded. However, already now it can be stated that the maximum frequency of noctilucent clouds depends on the geographic latitude.

L.V.Ye. ✓

Translator's note: This is the full translation of the original Russian abstract.

Card 3/3

83339

3/169/60/000/007/010/016
A005/A001

The Organization of the Investigation of Noctilucent Clouds During the International Geophysical Year

of noctilucent clouds during the IGY. A working group on noctilucent clouds was founded, attached to the Interdepartmental Committee for the preparation and execution of the IGY; this working group approved the investigation program and the instruction for visual observations of noctilucent clouds. The Central Administration of the hydrometeorological service of USSR charged the meteorological station network, located within the belt of latitudes from 45° to 70° n. lat. (altogether 220 stations), with carrying out visual observations on the twilight sky for recording the presence or absence of noctilucent clouds. The second Conference on noctilucent clouds took place on April 9-10, 1957 in Moscow, which discussed the observation program embracing four topics: 1) the registration of the events of noctilucent clouds for studying the seasonal distribution of their frequency. The registration of the geographical limits of spreading the observed fields of noctilucent clouds; 2) the determination of the altitudes of noctilucent clouds; 3) the registration of the motions of noctilucent clouds; 4) the absolute photometry for studying the indicatrices of scattering by noctilucent clouds. The material assembled during the IGY period is of considerable amount and appears as the first collection of observation data for an

.Card 2/3

83339

S/169/60/000/007/010/016
A005/A001

3,5000

Translation from: Referativnyy zhurnal, Geofizika, 1960, No. 7, pp. 202 - 203,
8461

AUTHOR: Grishin, N.I.

TITLE: The Organization of the Investigations of Noctilucent Clouds During
the International Geophysical Year

PERIODICAL: Tr. Soveshchaniya po serebristym oblakam, 1958 (Vol. 1). Tartu,
1959, pp. 68-76 (English summary)

TEXT: On January 25-31, 1955, the second congress of the All-Union
Astronomic-Geodetical Society took place in Leningrad; a resolution was accepted
on the organization of special scientific large-scale observations of noctilucent
clouds during the IGY period according to a especially elaborated program. The
conference on noctilucent clouds took place on December 1-2, 1956, in Moscow,
which was called by the Central Council of the All-Union Astronomic-Geodetical
Society. The Conference discussed questions of program and method of investigations.

Card 1/3

GRISHIN, N.I.
GRISHIN, N.I.

Observations of noctilucent clouds. Priroda 47 no.1:55-57 Ja '58.
(MIRA 11:1)

1. Institut prikladnoy geofiziki Akademii nauk SSSR, Moskva.
(Clouds)

GRISHIN, N.I.

Studying movements of noctilucent clouds. Bul. VAGO no.21:52-60
'58. (MIRA 11:6)

1. Moskovskoye otdeleniye Vsesoyuznogo astronomo-geodezicheskogo
obshchestva, meteornyy otdel.
(Clouds)

80575

SOV/169-59-7-7454

Some Results From Observations of Noctilucent Clouds in 1957

sufficient knowledge of a series of factors (optical visibility conditions of the noctilucent clouds for clear sky, the role of the observer's attentiveness, the discernibleness of the noctilucent clouds, etc.) renders this reduction for the time being not very definitive. All the same, the reduction increases apparently the general quantity of the noctilucent cloud phenomena from 61 to 94, i.e., by 50%. Theodolitic measurements of the boundaries of the noctilucent cloud regions yielded materials for the judgment on their geographic extension and the magnitude of areas occupied by these regions. The existence of vertical displacements in the regions of noctilucent clouds calls for the determination of their relief, i.e., of the altitudes above the earth. A stereophotogrammetric method has been developed for this purpose, which permits the determination of the altitude of points of the noctilucent clouds from the basis photographs with an accuracy up to 0.1 km. The movements within the regions of noctilucent clouds (particularly the wave movements) were investigated by the time magnifying study. Moreover, the absolute photographic photometry of the noctilucent clouds was performed for determining their dispersion indicatrix. The stations for observations pertaining to this problem were arranged along the line Leningrad - Ryasan'.

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N.D. Rosenblyum

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SOV/169-59-7-7454

Some Results From Observations of Noctilucent Clouds in 1957

summer season 1957, the noctilucent clouds were observed in 5% of all night observations. The difficulty in observations consisted in the danger of confusing the noctilucent clouds with ordinary tropospheric clouds or with clear gaps in the latter under the influence of the twilight illumination, in the low brightness of the noctilucent clouds, and in the local weather conditions. The frequency course in time of the phenomenon of noctilucent clouds was compared with that of the last years (for observations in the European part of the USSR). The maximum frequency occurred in July, like in the last years; a sharp minimum of the continuous tropospheric cloudiness falls on the same period as the comparison shows. This circumstance warrants partly the questioning of the common belief as to the sharp seasonal prevalence of the phenomenon of noctilucent clouds. It is possible that the seasonal prevalence of the latter is caused by the periodical refinement of the observational conditions. Having the data on the visibility of the noctilucent clouds from many stations, one can reduce (basing on the information on the tropospheric cloudiness) the frequency of the noctilucent cloud phenomenon to the conditions without disturbances. However, the in-

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SOV/169-59-7-7454

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 7, p 141 (USSR)

AUTHOR: Grishin, N.I.

TITLE: Some Results From Observations of Noctilucent Clouds in 1957

PERIODICAL: Mezhdunar. geofiz. god. Inform. byul., 1958, Nr 5, pp 47 - 55

ABSTRACT: Investigations of the noctilucent clouds are carried out in the USSR according to the program of the IGY on the initiative of the All-Union Astronomic-Geodetic Society (VAGO) by a series of institutions: VAGO, Institute of Applied Geophysics, the Hydro-meteorological Service, and the Ural University, which work under the general guidance of the Astronomical Observatory of the Leningrad State University. The problem of the frequency and geographic extension of the noctilucent clouds is discussed in detail. The observations in 1957 embraced the region of appearance of the noctilucent clouds extending 100° - 110° in longitude and 20° in latitude. The observation stations were located in the regions of Riga - Tartu, along the line Bologoye - Ryasan', in the region of Sverdlovsk and in Irkutsk. In the

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Observations of Luminous Clouds

04/20-22-1-6/16

nature of the particles forming them and the optical characteristics of the earth's atmosphere. There is 1 photo.

ASSOCIATION: Institut prikladnoy geofiziki Akademii nauk SSSR, Moskva
(The USSR Academy of Sciences' Institute of Applied Geophysics, Moscow)

Card 3/3

Observations of Luminous Clouds

NOV/10-58-1-8/26

of the upper stratosphere, that of the luminous clouds assumes an important place in the general complex of hydrometeorological research during the International Geophysical Year. In this connection, changes in the boundaries of the luminous cloud zones should be studied with respect to climate and the territorial relief beneath, seasonal frequency, maximum duration and occurrence. In addition to this, research is concerned with the determination of the altitude and motions of the clouds in diverse latitudes and longitudes of their appearance. All these observations will yield direct factual material on the morphological nature and the dimensions of the vertical motions of the clouds. They will also yield an insight into planetary circulation, and the determination of individual physical magnitudes of baric or other disturbing elements in the upper stratosphere. The Geofizicheskii institut Akademii nauk SSSR (USSR Academy of Sciences' Geophysical Institute) will continue its slow-motion filming of the wave motion and other motions of the luminous clouds. This filming started in 1953. Finally, a study of the all-round optical properties of the clouds will be equally important to the understanding of the physical

Card 2/3

AUTHOR: Grishin, N.I.

SVN 26-59-1-9/36

TITLE: Observations of Luminous Clouds (Nablyudeniya serebristykh oblakov)

PERIODICAL: Priroda, 1958, Nr 1, pp 55-57 (USSR)

ABSTRACT: Luminous clouds are the highest of all hitherto known cloud types of the atmosphere. Their periodical appearance points to the instability of the physical properties of the atmosphere at an altitude of 75 to 90 km. They are formed within an extremely rarefied medium and thus have a very small optical density. This feature limits the period of their visibility from the earth to the hours of navigational and astronomical twilight. These are similar to alto-cirrus clouds in outer appearance. Their mean altitude can be assumed to be 82 km. They appear only within a limited zone of mean latitudes and during the hot season of each hemisphere. This distribution by latitude and season, characterizes an existing heterogeneity of the atmosphere's upper layers. This is the effect of the existence of a definite atmospheric circulation of planetary size. The problem of weather prognoses is closely linked with that of the general circulation of the atmosphere. Among the problems of the meteorological elements

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- Astronomical Calendar; Yearbook. Variable Part; 1959 SOV/1840
- Noctilucent Clouds in 1957 (N.I. Grishin) 214
Stereotriangulation methods for determining the height of clouds are described.
- Interaction and Nature of Galaxies (B.A. Vorontsov-Vel'yaminov) 231
This article treats galactic bodies, tails, the units bridging them, and also double and multiple galaxies.
- Soviet Astronomers in the United States of America (A.G. Masevich) 243
This article describes the June-July 1957 visit of a Soviet delegation of astronomers, headed by V.A. Ambartsumyan, to the United States.
- The Eighth International Astronautical Congress (A.G. Masevich) 263
This article describes the Astronautical Congress held October 12, 1957 in Barcelona.
- Card ~~6~~⁴10

PART II. SUPPLEMENTS

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Advances in Astronomy in the Years 1956 and 1957

This article discusses the observatory studies made on solar activity, the structure and temperature of the chromosphere, the exterior of the solar corona, studies conducted at the Crimean Astrophysical Observatory, large-scale and turbulent motions in the Sun's photosphere, studies of the Sun's general and localized magnetic fields, the stars including the variable ones, the spiral structure of the Galaxy, the Sun, the planets, comets, the Moon's atmosphere, the nature of Venus and Mars, and the meteors.

Artificial Satellites of the Earth and the Danger in Astronautics
From Meteors (V.V. Fedynskiy) 197

The author reports mainly on studies of cosmic rays, the Sun's corpuscular radiation, micrometeorites (recorded by means of ammonium-phosphate piezoelectric counters) and the annual distribution of micrometeorites and their tentative quantities.

208

The Mrkos Comet (1957 d) (F.Yu. Zigel')

This article discusses the Mrkos Comet which was discovered on August 3, 1958. The comet's parabolic orbital elements are computed and the comet photographed. Observed by several Soviet astronomers its study provided much new material.

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Astronomical Calendar; Yearbook. Variable Part; 1959 SOV/1840

of the Sun, Moon, Mars, and Jupiter, the satellites of Jupiter and Saturn; N.D. Rozenblyum (MOVAGO) - ephemerides and heliocentric longitudes of planets; I.F. Yegorchenko, A.A. Kaverin, T.G. Konstantinova, V.A. Kuklina, G.V. Kuklin, Z.G. Sazonova, L.I. Chernykh, and N.S. Chernykh - data on 144 points in the USSR for the full solar eclipse of October 2, 1959; Ye.G. Demidovich (GAGO) - occultation of the stars and planets by the Moon, observation of the Polar Star, computation of stellar coordinates; V.A. Bronshteyn (MOVAGO) - comets; N.S. Yakhontova - the lesser planets; and, N.B. Perova (MOVAGO) - variable stars. The second part, the Supplement, contains a review of the achievements in astronomy for the years 1956 and 1957, written by V.A. Bronshteyn, O.D. Dokuchayeva, L.A. Katasev, M.A. Klyakotko, P.P. Parenago, and I.S. Shcherbina-Samoylova under the editorship of A.G. Masevich, articles on artificial satellites, the danger in astronautics from meteors, the nature of galaxies, articles on scientific meetings held in the Soviet Union and abroad, and articles on the anniversaries of events in astronomy. The book is profusely illustrated with tables, maps, photographs, and diagrams. The Supplement includes some 125 Soviet references grouped according to subject matter and type of publication.

Card 2/10

GRISHIN, N. I.

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PHASE I BOOK EXPLOITATION

SOV/1840

Vsesoyuznoye astronomo-geodezicheskoye obshchestvo

Astronomicheskii kalendar; yezhegodnik. Peremennaya chast'; 1959
(Astronomical Calendar; Yearbook. Variable Part; 1959) Moscow,
Fizmatgiz, 1958. 370 p. 8,500 copies printed.

Ed.: I.Ye. Rakhlin; Tech. Ed.: S.N. Akhlamov; Editorial Board:
P.I. Bakulin (Resp. ed.), S.G. Kulagin, A.G. Masevich, and
P.P. Parenago.

PURPOSE: This astronomical calendar is intended for specialists in
astronomy, astrophysics, and geophysics.

COVERAGE: The book is divided into two parts. The first, based on
data taken from the USSR Astronomical Yearbook for 1959, consists
of ephemerides and accompanying text, compiled and written by the
following specialists: S.G. Kulagin and L.D. Kovbasyuk of the
GAGO (State Astronomical and Geodetical Society) - notes on
ephemerides, the ephemerides of the Sun and Moon; M.M. Dogayev
of the MOVAGO (Moscow Branch of the All-Union Astronomical and
Geodetic Society) - text and maps of the visible trajectories of
the planets, text and maps of eclipses, the physical coordinates

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GRISHIN, N.I.

Noctilucent cloud above the European territory of the U.S.S.R.
Astron. tsir. no.181:24-25 Je '57. (MIRA 13:3)

1.Sektsiya serebristyykh oblakov Vsesoyuznogo astronomo-geodezicheskogo
obshchestva (VAGO).
(Clouds)

GRIFFIN, N.

GRIFFIN, N.

Photography and geophysical observations. Sov. foto 10 no. 3:42-45
Ag 197. (MIRA 10:9)
(Photography--Scientific applications)

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GAISHIN, I.I. (Moskva)

The second conference on noctilucant clouds. Astron. tsir. 1957:24
My '57. (MIR 1957)

(Clouds---Congresses)

GRISHIN, N.I., (Moskva)

Observation of noctilucent clouds during the International
Geophysical Year. Fiz. v shkole 17 no.1:23-27 Ja-F '57.

(MLRA 10:2)

(Clouds)

GRISHIN, N.I.

Using motion pictures to study movements of noctilucent clouds.
Meteor. i gidrol. no. 3:34-37 Mr '57. (MLRA 10:5)
(Clouds) (Motion pictures in meteorology)

GRISHIN, N. I.

Grishin, N. I. *Instruktsiya dlia nabludeniia sverkhsvetnykh ob'ektov*. [Instructions for observations of superluminal objects]. Moscow: Akademiia Nauk SSSR, 1957. 32 p. 6 figs., tables, 27 refs.
English trans. by John Miller issued by American Meteorological Society under Contract.
AF 19(608)-1436, June 1957. Includes illus., etc.

RJE

GRISHIN, N.I. (Moskva)

Conference on noctilucant clouds. Astron. tsirk. no.175:25-26 D '56.
(Clouds) (MLRA 10:5)

GRISHIN, N.I. (Moskva)

Studying the continuous spectra of noctilucent clouds. *Biul VAGO*
no.19:3-16 '56. (MLRA 10:3)

1. Moskovskoye otdeleniye Vsesoyuznogo astronomo-geodezicheskogo
obshchestva. (Clouds--Spectra)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000616900017-6

GRISHIN, N.I. (Moscow)

Noctilucent clouds in the Third Geophysical Year (1957-1958).
Astren.tsir. no.161:19-21 J1'55. (MLRA 8:12)
(Clouds)